

DISCUSSION OF THE CLAIMS

Claims 1, 3, and 5-18 are active in the present application. Claims 16-18 are new claims. Support for new Claims 16 and 17 is found in the previously presented claims. Support for new Claims 18 and 19 is found in the examples of the specification. Independent Claim 1 is amended to recite features of previously presented Claim 2 and/or features of one embodiment of the invention disclosed in original Claim 1.

No new matter is added.

REMARKS

Applicants thank the Office for withdrawing the rejections set forth in the May 1, 2009 Office Action.

Independent Claim 1 is drawn to an organic light-emitting diode that contains an uncharged platinum(II) complex that must be one of the formulas recited in the claim. In formula (II) the groups R⁷ and R⁸ are selected from the group consisting of acetylide, thiocyanate and isocyanate. The groups R¹² and R¹³ of formula (III) are now both CN (i.e., cyanide ion).

The Office is now of the opinion that the organic light-emitting diode of the previously presented claims is obvious over Song ("Synthesis and Luminescent Study of ...") in combination with one or more of Rubner (US 6,548,836); Kuimova ("A Fast Time-Resolved Infrared Spectroscopic Investigation ..."); and McGarrah ("Dyads for Photoinduced Charge Separation Based ...").

Applicants submit the subject matter of the present claims is patentable over the art of record.

The Office asserted that the previously pending claims were obvious in view of Rubner (US 6,548,836) in combination with one or more of Song ("Synthesis and Luminescent Study ..."), Kuimova ("A Fast Time-Resolved Infrared Spectroscopic ..."), McGarrah ("Dyads for Photoinduced Charge Separation ...") and Miskowski ("Electronic Spectra and Photophysics..."). Applicants submit that the applied art fails to disclose or suggest the particular organic light-emitting diode of present Claim 1.

As mentioned above, Claim 1 now recites platinum(II) complexes of particular formulae. Song fails to teach or suggest the platinum complexes of the present claims. For example, formula (I) of present Claim 1 includes a group "X" which, in amended Claim 1, must be one of a phenylene group linked in the 1 and 2 positions to a P atom or a 1,1'-

biphenylene group linked in the 2 and 2' positions to two P atoms. Song, at best, discloses complexes which may be characterized as naphthyl complexes and not the phenylene and/or biphenylene-type complexes now described by formula (I) of amended Claim 1.

McGarrah may disclose certain acetylide-containing platinum complexes, however, such complexes do not disclose or suggest the platinum complexes of the present claims where corresponding Pt-bipyridyl complexes are not required to have the cyanide groups which are an express requirement of the groups R⁷ and R⁸ of formula (II) of amended Claim 1. Further, the bipyridyl group of the McGarrah complexes are not substituted with tert-butyl groups as is required in the groups R¹⁴ and R¹⁵ of formula (III) of amended Claim 1.

The Office relied on Miskowski as evidence that cyano and acetylide ligands are equivalent or interchangeable. The Office asserts that such ligands are interchangeable because they are both strong-field ligands. As a first point, Applicants note that solely because two ligands may be strong-field ligands does not mean the ligands or complexes derived from the ligands will exhibit the same properties. For example, CO is known to be a strong-field ligand. However, it is readily recognized by those of ordinary skill in the art that complexes of a metal with carbon monoxide are substantially different both physically and chemically in comparison to complexes of a metal with a cyano ligand.

Applicants thus submit that the Office's assertion that cyano and acetylide are "equivalent and interchangeable" solely on the basis that they are both strong-field ligands is unsupportable as a matter of fact.

Irrespective of the Office's erroneous assertions with respect to the equivalency and interchangeability of cyano and acetylide ligands, Applicants point out that the platinum complex of formula (III) of the present claims includes groups R¹² and R¹³ which must be cyano (CN) ligands. Miskowski fails to disclose a platinum(II) complex corresponding to the cyano-substituted material of formula (III) of amended Claim 1.

Further still, Applicants submit that the rejection of the claims amounts to little more than hindsight reasoning. The Office searched the art to find different components and ligands of the platinum complexes recited in the present claims and used such disclosure as a basis for asserting that the particular complexes recited in the claimed would be obvious. The trouble with the Office's reasoning is that it makes any and all known or unknown platinum complexes obvious. Such a result is in inherent conflict with patent law. It is not sufficient for the Office to base an obviousness rejection solely upon the disclosure of different components of a claimed invention in published material, the Office must identify some reason why one of ordinary skill in the art would combine or modify the references to arrive at the claimed invention. Here, the Office's reasoning for combining the references is absent, erroneous and/or insufficient.

For the reasons discussed above in detail, Applicants submit the rejection is not supportable and all claims should now be allowed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, L.L.P.
Norman F. Oblon



Stefan U. Koschmieder, Ph.D.
Attorney of Record
Registration No. 50,238

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413-2220
(OSMMN 08/09)